

I/WE CLAIM:

1. A starter mechanism adapted to be connected to the shaft of an internal combustion engine comprising:

5 a starter housing;
a first spring operatively connected to the starter housing;
a pulley operatively connected to the first spring;
a second spring operatively connected to the pulley; and,
an arbor operatively connected to the second spring; and,
10 an at least first engagement means operatively connected to the arbor and adapted to be operatively attached to an associated engine crankshaft.

2. The starter mechanism of claim 1, wherein the arbor further consists of a first and second hub located on opposite sides of the arbor.

15 3. The starter mechanism of claim 2, wherein the arbor further comprises at least a first hole located adjacent to the second hub and wherein an arcuate portion of the second hub partially extends around the at least first hole.

20 4. The starter mechanism of claim 3, wherein the engagement means further comprises a first end, a second end, and a body.

25 5. The starter mechanism of claim 4, wherein the first end of the engagement means extends beyond the body and is received by the at least first hole and wherein the first end pivots about its axis.

6. The starter mechanism of claim 5, wherein the engagement means further comprises a post extending above the body.

30 7. The starter mechanism of claim 6 further comprising:

a retaining means operatively attached to the housing, wherein the retaining means further comprises apertures.

8. The starter mechanism of claim 7, wherein the aperture engages the post.

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9. The starter mechanism of claim 8, wherein the at least first engagement means consists of a starter dog, wherein the starter dog is adapted to be operatively attached to an associated engine flywheel.

10 10. A starter mechanism adapted to be connected to an associated internal combustion engine, comprising:

a starter housing having a post that extends outwardly;

an arbor having a first hub, a second hub, and at least one hole adjacent to the first hub, wherein an arcuate portion of the second hub partially extends around the at least first hole.

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a pulley having a first sleeve and a chamber;

a first spring having first and second ends, the first end of the first spring being operatively connected to the starter housing, the second end of the first spring being operatively connected to the first sleeve of the pulley;

20 a second spring having first and second ends, the first end of the second spring being operatively connected to an outer portion of the chamber of the pulley, the second end of the second spring being operatively connected to the first hub of the arbor;

an engagement means having a first end, a second end, and a body, the first end being operatively connected to the arbor and wherein the engagement means is adapted to receive an associated engine flywheel or crankshaft; and,

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a retaining means operatively attached to the housing, wherein the retaining means further comprises s.

11. The starter mechanism of claim 10, wherein the engagement means further comprises a post extending above the body.

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12. The starter mechanism of claim 11, wherein the post engages the aperture.

13. A method of starting an engine, comprising the steps of:

providing an engine, a starter mechanism having a starter housing, a first spring, a
5 pulley, a second spring, an arbor, an at least first engagement means, a retaining means, and a
handle operatively connected to a pull rope;

grasping the handle;

pulling the rope in a direction extending in an outward direction from the housing;

winding the second spring to facilitate in starting the engine; and,

10 releasing the handle to allow the rope to retreat into the housing.

14. The method of claim 13 further comprising the steps of:

providing the retaining means with an at least first aperture having a first end and
a second end.;

15 providing the at least first engagement means with a post extending above the
engagement means and the post being received by the aperture; and,

wherein the step of winding the second spring to facilitate in starting the engine
further comprises the step of, rotating the arbor to permit the post to move from the first end of
the aperture to the second end of the aperture.

20 15. The method of claim 14 further comprising the steps of:

wherein the step of moving the post from the first end of the aperture to the
second end of the aperture further comprises:

pivoting the engagement means from a first position to a second position

25 to permit the engagement means to engage the flywheel thereby turning the crankshaft and
starting the engine.